The Youth Risk Behavior Survey includes questions on use of marijuana, cocaine, inhalants, heroin, methamphetamine, steroids, and injected drugs, as well as marijuana use and drug acquisition on school property.

## **Lifetime Drug Use**

Reported marijuana use among Lancaster County teens increased then declined during the 1990s, while use of inhalants and injected drugs declined and experience with other illegal drugs changed little. New 1999 questions provided baseline data on reported methamphetamine and heroin use (Figure 1).

1999 YRBS data indicated that the most common illicit drug ever used by teens was marijuana (36.3%), followed by inhalants (10.9%) and methamphetamine (7.4%).

New to the 1999 YRBS were questions asking about lifetime heroin and methamphetamine use. In previous surveys, these drugs were grouped in a single question with several other illegal drugs. The new baseline data for 1999 indicates that more teens report having used methamphetamine than cocaine, heroin, or steroids.

From 1991 to 1997, the percentage of teens reporting ever having used marijuana increased from 34.2% to 41.0%, then it dropped to 36.3% in 1999, a percentage not significantly different from the 1991 percentage (34.2%).

The percentage of teens reporting that they ever used inhalants or used a needle to inject illegal drugs declined during the 1990s. However, the percentage of teens who reported ever using cocaine, steroids without a doctor's

prescription, or other illegal drugs<sup>‡</sup> changed little.

Trends in lifetime drug use generally held true for teens in different grades, males and females, and white and non-white teens. See the following pages for detail.

Lancaster County YRBS trends (1991-1999) were not always consistent with those in Nebraska (1993-1997)<sup>1</sup> and the U.S. (1991-1999)<sup>2</sup>. Stable or decreasing Lancaster County trends in most types of drug use contrasted with increasing trends in Nebraska and/or the U.S. One exception was inhalant use, for which both local and national trends were in decline from 1995 to 1999.

- 1 Tables published by Buffalo Beach Company, Lincoln, NE
- 2 Centers for Disease Control and Prevention: Youth Risk Behavior Trends Fact Sheet, <a href="http://www.cdc.gov/nccdphp/dash/yrbs/trend.htm">http://www.cdc.gov/nccdphp/dash/yrbs/trend.htm</a>; MMWR Surveillance Summaries 1999, 1997, 1995, 1993.

**High School Students** 50% 40% 30% 20% 10% 0% Ever Ever Used Ever Ever Used Ever Used Ever Ever Ever Steroids ‡‡ Used Used Used Injected An Other Illegal Used Metham-Cocaine<sup>†</sup> Inhalants †† Marijuana Illegal Drug Drugs ‡ Heroin phetamine 1991 34.2% 5.8% 6.5% 3.2% 21% 1993 26.1% 4.5% 14% 3.2% 6.4% 1995 36.5% 4.7% 15.8% 2.4% 18.9% 3.3% 1997 41% 9.4% 15.4% 2.9% 23.6% 2.4% 1999**=** 36.3% 5.6% 10.9% 1.3% 1.6% 7.4% 2%

Figure 1: Lifetime Drug Use\*

<sup>&</sup>lt;sup>†</sup> "any form of cocaine including powder, crack or freebase"

<sup>†† &</sup>quot;sniffed glue, breathed the contents of aerosol spray cans, or inhaled paints or sprays"

<sup>&</sup>lt;sup>‡</sup> "LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin"

<sup>\*\* &</sup>quot;steroid pills or shots without a doctor's prescription"

<sup>\*</sup> Grade Adjusted

Illegal Drugs

YRBS Results
Lancaster County, NE

## **Current Drug Use, Age of First Use, Drugs On School Property**

YRBS data, 1991-1999, indicate unchanged reports of current (within the past 30 days) marijuana and cocaine use. There are signs that teens may be smoking marijuana at earlier ages.

Following the pattern of lifetime history of marijuana use **(Fig. 1)**, current use, or the percentage of teens reporting that they used marijuana during the past 30 days, increased from 1991 (17.3%) to 1997 (24.6%), then declined in 1999 to a level (18.3%) comparable to that at the beginning of the decade **(Fig. 2)**. Thus, there was no cumulative change over the 1990s in current marijuana use.

For the first time in 1999, the YRBS asked about inhalant use during the past 30 days. Three percent of teens reported using inhalants during the past 30 days, as compares to 1.7% for cocaine and 18.3% for marijuana use.

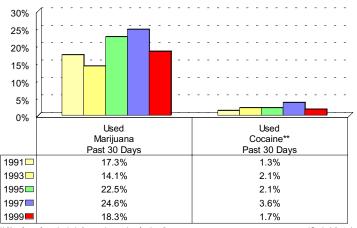
Among teens who reported ever using marijuana, the percentage who first used marijuana at 11 to 14 years of age appears to have increased, but these increases were not statistically significant **(Fig. 3).** In 1999, nearly half (45.8%) of reported marijuana smokers reported that they first used marijuana at 13-14 years of age.

Two YRBS questions address drugs on school property **(Fig. 4)**. Both of these indicators declined from 1995 to 1999.

Teens reporting that they were offered, sold, or given drugs on school property during the past 12 months increased from 1993 (16.9%) to 1995 (28.5%). Declines were apparent after 1995, but the indicator remained significantly higher in 1999 (24.6%) than it had been in 1993 (16.3%).

The percentage of teens reporting that they used marijuana on school property during the past 30 days changed little overall from 1993 (4.3%) to 1999 (4.5%).

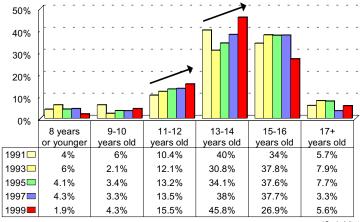
Figure 2: Current Drug Use (Past 30 Days)\*
High School Students



\*\* "Any form of cocaine including powder, crack or freebase"

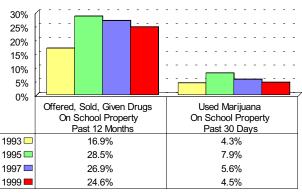
\*Grade Adjusted

Figure 3: Marijuana - Age of First Use\*
High School Students Who Reported Smoking Marijuana
During Their Lifetime



\*Grade Adjusted

Figure 4: Drug Use On School Property\*
High School Students



\*Grade Adjusted

## **Differences by Gender**

During the 1990s, a gender gap (higher male rate) for marijuana use closed, but reports of drug use on school property and inhalant use remained more prevalent among males (Figs. 5 - 7).

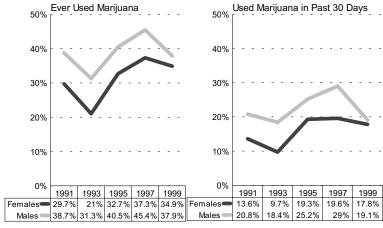
In 1999, the gap between males and females in reported marijuana use is the smallest it has been since the survey began in 1991 **(Fig. 5)**. In 1991, males were 1.5 times more likely to report using marijuana in the past 30 days. By 1999 this ratio had disappeared.

The gap between male and female teens in reported lifetime marijuana use showed similar declines. For both lifetime and past-30-days use, reported female marijuana use seems to have increased (not a statistically significant increase), while reported male use remained steady.

Over the 1990s there has consistently been a higher apparent cocaine usage rate reported by males (**Fig. 6**). However, the gap has never been statistically significant and appears to have narrowed during the period. Increases among females during the period were not statistically significant.

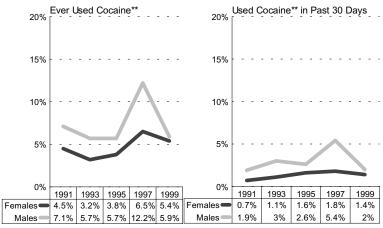
In 1999, the only statistically significant gender gaps for illegal drug use were a higher rate among males for reported drug use on school property, marijuana use on school property, and inhalant use **(Fig. 7)**.

Figure 5: Marijuana Use\*
High School Students



\*Grade Adjusted

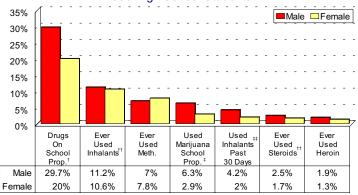
Figure 6: Cocaine Use\*
High School Students



\*\* "Any form of cocaine including pow der, crack, or freebase"

\*Grade Adjusted

Figure 7: Marijuana and Other Drugs\*
1999 High School Students



<sup>† &</sup>quot;offered, sold, or given drugs on school property in past 12 months" †† "sniffed glue, breathed the contents of aerosol spray cans,

"used marijuana on school property in the past 30 days"
 "steroid pills or shots without a doctor's prescription"
 \*Grade Adjusted

Illegal Drugs

YRBS Results
Lancaster County, NE

0%

1991

1993

1995

1997

1999

9th

26.8%

19.6%

34.6%

39.4%

27.1%

## **Differences by Grade**

As with many other risk behaviors, teens in older grades have generally been more likely than those in younger grades to report illegal drug use. There were decreases during the 1990s in reported inhalant use by 9th and 12th graders (Figs. 8 - 10).

In 1999, reported lifetime use of marijuana was higher among teens in older grades, ranging from 27.1% among 9th graders to 47.9% among 12th graders. All grades appeared more likely in 1999 to report that they had ever used marijuana than in 1991 **(Fig. 8)**, but this was not a statistically significant increase.

The percentage of teens who reported using marijuana during the past 30 days also increased in each grade from 1991 to 1999, even though these percentages were lower in 1999 than in 1997 **(Fig 9)**.

For teens as a whole, the percentage reporting that they had ever used inhalants decreased from 1995 to 1999 (**Fig. 1**). This decline was most pronounced among 9th and 12th graders. Ninth graders have generally been most likely to report inhalant use (**Fig. 10**).

In 1999, the percentage of teens reporting that they had ever used methamphetamine was, by grade: 7.2% among 9th graders, 4.4% among 10th graders, 9.3% among 11th graders, and 8.9% among 12th graders.

Reported prevalence and sample sizes for other drug questions were not large enough to show any clear trends by grade.

Figure 8: Ever Used Marijuana by Grade
High School Students

60%
40%
20%

11th

38.7%

31.5%

38.6%

39.3%

40%

12th

44.2%

32.9%

46.2%

51.6%

47.9%

Figure 9: Marijuana Use in Past 30 Days by Grade High School Students

10th

27.8%

27.3%

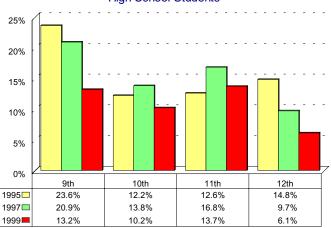
33.8%

31.6%

21%

35% 30% 25% 20% 15% 10% 5% 0% 10th 11th 12th 9th 1991 13.1% 15.7% 19.1% 21.5% 1993 10.7% 17.8% 16.9% 11.1% 1995 24.2% 21.5% 29.8% 14.8% 1997 25.3% 19.2% 22.1% 32.3% 1999 20.9% 13.7% 16.5% 22.5%

Figure 10: Ever Used Inhalants by Grade
High School Students



## **Differences by Race**

During the 1990s, non-white teens were more likely than white teens to report marijuana use on school property, steroid use, and inhalant use. Other white/non-white differences in drug use were not statistically significant. The only statistically significant increase in reported drug use was an increase in reported current (past 30 days) cocaine use among non-white teens (Figs. 11 - 13).

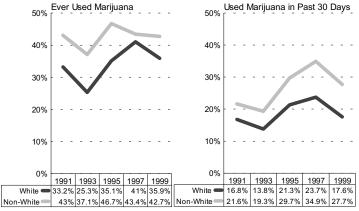
YRBS sample sizes for major race/ethnic groups (Black, Hispanic, American Indian or Asian) were not large enough to reliably compare these groups or examine trends over time. However, selected comparisons were feasible between white teens and those who may be classified as "non-white" -- of minority race or Hispanic ethnicity.

During the 1990s, non-white teens have consistently reported higher rates of marijuana and cocaine use than white teens, however these differences have never been statistically significant **(Figs. 11 - 12)**. There was an increase in reported cocaine use over the past 30 days by non-white teens. Other increases in reported drug use were not statistically significant.

In 1999, non-white teens were more likely than white teens to report use of steroids, inhalants, as well as use of marijuana on school property. Other white/non-white differences were not statistically significant **(Fig. 13)**.

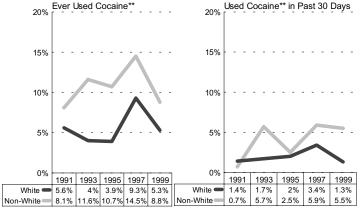
The largest gap between non-white and white teens could be seen in reported steroid use. In 1999, non-white teens were 6.5 times more likely than white teens to report that they had ever used steroids (pills or shots) without a doctor's prescription (**Fig. 13**).

Figure 11: Marijuana Use\*
High School Students



\*Grade Adjusted

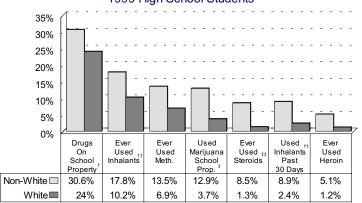
Figure 12: Cocaine Use\*
High School Students



<sup>\*\* &</sup>quot;Any form of cocaine including powder, crack, or freebase

\*Grade Adjusted

Figure 13: Illegal Drug Use\*
1999 High School Students



H "offered, sold, or given drugs on school property in past 12 months

HH "sniffed glue, breathed the contents of aerosol spray cans,
or inhaled paints or sprays"

<sup>&</sup>quot;steroid pills or shots without a doctor's prescription"

\*Grade Adjusted

# **Illegal Drugs**

**Health Objectives for the Year 2010:** Reduce death, injury, and socio-economic consequences of alcohol and other drug abuse. Educate the public on the dangers of alcohol and other drug abuse.

### **Public Health Discussion**

Marijuana use among adolescents is a concern in Lancaster County because of an increase over the past ten years reporting use in the month prior to the survey.

Marijuana is the illegal drug most often used in America. While marijuana use increased 38% nationally among high school youth in the 1990's, the number of those who believe that marijuana use is harmful has dropped by 22% in the past three years. These changes in perception and knowledge

may be due to a decrease in antidrug messages in the media, an increase in prodrug messages through the pop culture, and a lack of awareness among parents about this resurgence in drug use.<sup>1</sup>

All forms of marijuana (cannabis) are mindaltering drugs, they all contain THC (delta-9-tetrahydrocannabinol), the main active chemical in marijuana. There are about 400 chemicals in a cannabis plant, but THC is the one that affects the brain the most. THC disrupts the nerve cells in the part of the brain where memories are formed. Over time, the drug takes its toll on mental functions, increasing the chance of users developing schizophrenia, chronic anxiety, personality disturbances and depression. Lack of motivation, fatigue, loss of desire to work, and lack of concern over personal appearance often result.

The effects of marijuana on each person depends on how much THC it contains, the way the drug is taken, experience and expectations of the user, the setting where the drug is taken and whether drinking or other drug use is also going on. Marijuana can be harmful through both immediate effects and health over time. Marijuana hinders the user's short-term memory, and causes difficulty in handling complex tasks. The drug affects perceptions and reaction time, thus users could be involved in auto crashes



"Effective deterrents to illegal drug use among our kids include community strategies that value youth. 'Asset building' and involving youth, as well as families, schools, faith communities, businesses, policy makers and human service providers, are necessary for quality prevention programs."

Deb Sprague, Executive Director Lincoln Council on Alcoholism and Drugs

where skills in judging distance and reactions to sights and sounds are required. Drug users also may become involved in risky sex. Students under the influence of marijuana may find it hard to study and learn. Long-term effects of marijuana can lead to cancers similar to those who smoke tobacco. Marijuana smoke contains some of the same cancercausing compounds as tobacco. Heavy marijuana use can affect hormones in both male and females. In men, it causes effects from delays in puberty to adverse effects on sperm production. Among women, marijuana can disrupt the normal monthly menstrual cycle and inhibit the discharge of eggs from the ovaries. The immune system, which protects the body from many agents that cause infections, can be impaired with marijuana use. Marijuana smokers may have symptoms of daily cough, chronic bronchitis and more frequent chest colds. Babies born to marijuana users are reported to be shorter, weigh less, and have smaller head sizes that those born to mothers not using the drug. Smaller babies are more likely to develop health problems.

## Parental Roles and Responsibilities:

#### There is no magic way of preventing teenage drug use. Parents can:

- 1. Establish and maintain good communications. Be influential by talking to your children about the dangers in using marijuana and other drugs.
- 2. Make clear rules and enforce them with consistency and consequences. Remain actively engaged in children's lives. Parents can be active in schoolwork, recreation and social activities with their children's friends.
- 3. Appreciate a child's individuality. Parents need to value their children, devoting daily

- effort to building their child's self-esteem and sense of purpose to life.
- 4. Be a positive role model. Parents who role model their values through open communication with their children help their youth make positive decisions not to use marijuana and other illegal drugs.
- 5. Help your child deal with peer pressures and media messages that may trivialize drug use.
- 6. Monitor your child's activities.

## **Community Roles and Responsibilities:**

It is still difficult to find positive treatment programs specifically for marijuana and illegal drug users.

More treatment centers and trained drug treatment professionals are needed. More research is needed to identify characteristics of users that are predictors of success in treatment and which approaches to treatment can be most helpful.

## Policy Makers' Role and Responsibilities:

Drug prevention programs through community and schools require funding streams that are continuous over time.

Comprehensive school health curriculums can reinforce healthy lifestyles and reduce risky behaviors.

#### **References:**

1. Lincoln-Lancaster County Health Department, "Healthy People 2010: Health Objectives for the Year 2010 for Lincoln and Lancaster County Nebraska." January 2000, D20